

CLAIM AMENDMENTS

1. (currently amended) A method of determining a physical ~~or chemical~~ parameter of wood pulp comprising:
 - a) applying excitation light at at least one predetermined wavelength to wood pulp, to produce fluorescence emission light from individual fibre particles of said pulp,
 - b) detecting fluorescence intensity of said fluorescence emission light, for each said predetermined wavelength, and
 - c) determining a physical ~~or chemical~~ parameter of individual fibre particles of the wood pulp from said fluorescence intensities.
2. (currently amended) A method according to claim 1 wherein at least a single wavelength of excitation light in the range 5 nm to 700 nm is applied in step a) ~~and a physical parameter is determined in step c).~~
3. (previously presented) A method according to claim 2 wherein said excitation light has a wavelength of 250 nm to 600 nm.
4. (previously presented) A method according to claim 3 wherein said wavelength is 360 nm to 500 nm.
5. (original) A method according to claim 1 wherein step c) comprises determining fibre thickness in said wood pulp from the detected fluorescence intensity in b).
6. (original) A method according to claim 1 wherein step c) comprises determining fibre cross-sectional area in said wood pulp from area under a fluorescence intensity profile derived from the detected fluorescence intensity in b).
7. (original) A method according to claim 1 wherein said step c) comprises determining fibre coarseness in said wood pulp from the detected fluorescence intensity per unit length in step b).

Commissioner for Patents

Serial No. 10/015,787

8. (cancelled)

9. (cancelled)

10. (cancelled)

11. (cancelled)

12. (currently amended) An apparatus for determining a physical ~~or chemical~~ parameter of wood pulp comprising:

i) means to apply excitation light at at least one predetermined wavelength to wood pulp, to produce fluorescence emission light from individual fibre particles of the wood pulp,

ii) detection means for detecting fluorescence intensity of the fluorescence emission light for each predetermined wavelength, and

iii) means for determining a physical ~~or chemical~~ parameter of individual fibre particles of the wood pulp from the fluorescence intensities.

13. (currently amended) An apparatus according to claim 12 wherein said means i) applies excitation light at at least a single wavelength in the range 5 nm to 700 nm, and means ii) iii) determines a physical parameter of individual fibre particles of the wood pulp.

14. (previously presented) An apparatus according to claim 13 wherein said wavelength is 250 nm to 600 nm.

15. (previously presented) An apparatus according to claim 13 wherein said wavelength is 360 nm to 500 nm.

16. (cancelled)